

## **AMENDMENTS TO THE CLAIMS**

The listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1.     **(Currently Amended)** A cushioned treadmill, comprising:  
a treadbase comprising a deck that moves when an exerciser exercises on the treadbase;  
and  
a self-adjusting cushioning assembly configured to (i) provide cushioning to movement of the deck; (ii) adjust the amount of cushioning provided to movement of the deck; and (iii) ascertain a coarse weight reading for a user when the user is positioned on the deck, the self-adjusting cushioning assembly comprising:  
a deflection sensor assembly adapted to ascertain the coarse weight reading of the user based on deflection of the treadbase,  
a user input mechanism,  
a plurality of coarse weight reading categories, and  
a plurality of pre-adjustment settings, wherein ~~such that~~ the cushioned treadmill adjusts the amount of cushioning provided by the treadmill based upon the coarse weight reading, coarse weight reading categories, the pre-adjustment settings, and the input provided by the user.
2.     **(Original)** The cushioned treadmill of claim 1, wherein the self-adjusting cushioning assembly automatically adjusts when a user steps on the treadbase.
3.     **(Original)** The cushioned treadmill of claim 1, wherein the self-adjusting cushioning assembly adjusts when a user having a different weight from the previous user steps on the treadbase.
4.     **(Previously Presented)** The cushioned treadmill of claim 1, wherein the user input mechanism comprises a user cushioning selection mechanism and wherein the user can use

the user cushioning selection mechanism to select the amount of cushioning to be provided by the self-adjusting cushioning assembly.

5.       **(Original)** The cushioned treadmill of claim 1, further comprising a sensor for adjusting the amount of cushioning provided by the self-adjusting cushioning assembly.

6.       **(Currently Amended)** The cushioned treadmill of claim 5, wherein the sensor comprises ~~a~~the deflection sensor assembly.

7. **(Currently Amended)** A cushioned treadmill, comprising:  
a treadbase comprising a deck that moves when an exerciser exercises on the treadbase;  
and

a self-adjusting cushioning assembly configured to (i) provide cushioning to movement of the deck; and (ii) adjust the amount of cushioning provided to movement of the deck, wherein a deflection sensor assembly ascertains a coarse weight reading of the user when the user is standing on the treadbase by monitoring the amount of deflection of the deck of the treadbase, the coarse weight reading being associated with one of a plurality of coarse weight reading categories, wherein the self-adjusting cushioning assembly automatically adjusts the amount of cushioning provided based on said one of a plurality of coarse weight reading categories.

8. **(Previously Presented)**. The cushioned treadmill of claim 1, wherein the user input mechanism comprises a user cushioning selection pad.

9. **(Original)** A treadmill as recited in claim 1, wherein the treadbase further comprises a treadbase frame, wherein the deck is coupled at one end to the treadbase frame and moves with respect to the treadbase frame when a user exercises on the treadbase frame.

10. **(Canceled)**

11. **(Currently Amended)** A cushioned treadmill, comprising:

a frame;

a deck mounted on the frame such that the deck moves with respect to the frame;

a belt trained about the deck; and

a self-adjusting cushioning assembly configured to provide cushioning to movement of the deck with respect to the frame and to automatically adjust the amount of cushioning provided to the movement of the deck, wherein the self adjusting cushioning assembly comprises a user cushioning selection mechanism, the self-adjusting cushioning assembly configured to ascertain a coarse weight reading of a user when a user is positioned on the deck based on deflection of the deck with respect to the frame, the coarse weight reading being associated with one of a variety of coarse weight reading categories, the self-adjusting cushioning assembly adapted to automatically adjust the amount of cushioning based on said one of a variety of coarse weight reading categories, the self-adjusting cushioning assembly also configured to automatically adjust the amount of cushioning provided based upon input provided to the user cushioning selection mechanism.

12. **(Original)** The cushioned treadmill of claim 11, wherein the frame comprises a tread base frame.

13. **(Previously Presented)** A cushioning treadmill as recited in claim 11, wherein the self-adjusting cushioning assembly comprises

(i) a cushioning mechanism positioned between the deck and the frame so as to cushion movement of the deck with respect to the frame;

(ii) a sensing assembly configured to sense deflection of the deck.

14. **(Original)** The cushioned treadmill of claim 13, wherein the self adjusting cushioning assembly further comprises a controller electrically coupled to the cushioning mechanism and the sensing assembly such that the amount of cushioning provided to movement of the deck is adjusted in light of feedback received by the controller regarding the amount of deflection experienced by the deck

15. **(Previously Presented)** The cushioned treadmill of claim 13, wherein the sensor is electrically coupled to the cushioning mechanism such that upon sensing deflection of the deck, the cushioning mechanism is adjusted.

16. **(Previously Presented)** A treadmill as recited in claim 13, further comprising a controller electrically coupled to the sensor and the cushioning mechanism wherein upon sensing deflection of the deck, the sensor sends a signal to the controller and the controller sends a signal to the cushioning mechanism to adjust the amount of cushioning of the deck.

17. **(Canceled).**

18. **(Previously Presented)** A treadmill as recited in claim 11, wherein the user can input a desired amount of cushioning, the desired amount of cushioning selected from the group consisting of hard, medium or soft cushioning.

19-27. **(Canceled).**

28. **(Currently Amended)** A cushioning treadmill configured such that the amount of cushioning is automatically set based on certain initial desired input levels of cushioning selected by the user, comprising:

a treadbase comprising;

a frame;

a deck;

an endless belt trained about first and second rollers coupled to the frame;

a cushioning mechanism configured to cushion movement of the deck with respect to the frame, the cushioning mechanism being configured to provide cushioning based on a plurality of pre-adjustment settings;

a sensing assembly configured to (i) sense deflection of the deck, ~~and to (ii) adjust the amount of deflection of said deck based on the amount of deflection sensed by the sensing assembly, and (iii) the sensing assembly configured to ascertain a coarse weight reading of a user positioned on the deck~~ based on movement of the deck relative to the frame, the coarse weight reading being associated with one of a plurality of coarse weight reading categories, the cushioning mechanism adapted to automatically adjust the amount of cushioning based on the pre-adjustment setting associated with the coarse weight reading category; and

an input mechanism linked to the sensing assembly such that the user can input a desired amount of cushioning.

29. **(Original)** A treadmill as recited in claim 28, wherein upon sensing a deflection that is greater than an amount that is initially selected by the user upon initial input, a controller signals the adjusting mechanism to decrease the amount of cushioning.

30. **(Original)** A treadmill as recited in claim 28, wherein upon sensing a deflection that is less than an amount that is initially selected by the user upon initial input, a controller signals that adjusting mechanism to increase the amount of cushioning.

31.     **(Original)** A treadmill as described in claim 30, wherein the sensing assembly comprises a sensor and a controller, wherein the controller is electrically coupled between the sensor and the cushioning mechanism.

32. **(Currently Amended)** A self-adjusting, cushioned treadmill configured to enable a user to input a desired amount of cushioning and to self-adjust during use of the treadmill such that the desired level of cushioning is achieved, the treadmill comprising:

- a frame;
- a deck moveably coupled to the frame;
- first and second rollers coupled to opposing ends of the frame;
- a belt trained about said rollers such that a running surface of said belt extends over said deck,

- a cushioning mechanism configured to cushion movement of the deck with respect to the frame, the cushioning mechanism being configured to provide cushioning based on a plurality of pre-adjustment settings;

- a sensor adapted so as to sense deflection of the deck, the sensor configured to ascertain a coarse weight reading of a user positioned on the deck based on deflection of the deck relative to the frame, the coarse weight reading being associated with one of a plurality of coarse weight reading categories, the cushioning mechanism adapted to automatically adjust the amount of cushioning based on the pre-adjustment setting associated with the coarse weight reading category;

- a controller electrically coupled to the sensor and to the cushioning assembly, the controller having a user input mechanism enabling the user to select a desired amount of cushioning within a range of available cushioning, such that upon sensing an amount of deflection of the deck that is not in accordance with the amount of cushioning selected by the user, the cushioning mechanism adjusts the amount of deflection of the deck.



**33. (Currently Amended)** A cushioned treadmill, comprising:

a treadbase having a treadbase frame and a deck movably coupled to the treadbase frame;

a cushioning mechanism positioned so as to cushion movement of the deck with respect to the frame, the cushioning mechanism being configured to provide cushioning based on a variety of pre-adjustment settings;

a sensing assembly coupled to at least the deck and configured to sense deflection of the deck relative to the treadbase frame, the sensing assembly configured to ascertain a coarse weight reading of a user when the user first steps on the deck, the coarse weight reading being associated with one of a variety of coarse weight reading categories, the cushioning mechanism adapted to automatically adjust the amount of cushioning based on the pre-adjustment setting associated with the coarse weight reading category;

a controller electrically coupled to the cushioning mechanism and the sensing assembly such that the cushioning mechanism is adjusted based on information received from the sensing assembly; and

a user cushioning selection pad configured such that a user of the cushioned treadmill can input a desired amount of cushioning into the user cushioning selection pad.

34. **(Currently Amended)** A self-adjusting, cushioned treadmill configured to enable a user to input a desired amount of cushioning and to self-adjust during use of the treadmill such that the desired level of cushioning is achieved, the treadmill comprising:

a frame;  
a deck moveably coupled to the frame;  
first and second rollers coupled to opposing ends of the frame;  
a belt trained about said rollers such that a running surface of said belt extends over said deck,

a cushioning mechanism configured to cushion movement of the deck with respect to the frame, the cushioning mechanism being configured to provide cushioning based on a plurality of pre-adjustment settings;

a sensor adapted so as to sense deflection of the deck, the sensor configured to ascertain a coarse weight reading of a user positioned on the deck based on deflection of the deck relative to the frame, the coarse weight reading being associated with one of a plurality of coarse weight reading categories, the cushioning mechanism adapted to automatically adjust the amount of cushioning based on the pre-adjustment setting associated with the coarse weight reading category;

a controller electrically coupled to the sensor and to the cushioning assembly, the controller adjusting the cushioning mechanism based on the deflection of the deck, wherein upon sensing an amount of deflection of the deck that is not in accordance with the desired amount of cushioning, the cushioning mechanism adjusts the amount of deflection of the deck.

35. **(Canceled).**

36. **(Canceled)**

37. **(Original)** The self-adjusting cushioning treadmill of claim 34, wherein the coarse weight reading is made when the user first steps on the deck.

38. **(Currently Amended)** A self-adjusting, cushioned treadmill configured to enable a user to input a desired amount of cushioning and to self-adjust during use of the treadmill such that the desired level of cushioning is achieved, the treadmill comprising:

- a frame;
- a deck moveably coupled to the frame;
- first and second rollers coupled to opposing ends of the frame;
- a belt trained about said rollers such that a running surface of said belt extends over said deck,

- a cushioning mechanism configured to cushion movement of the deck with respect to the frame, the cushioning mechanism being configured to provide cushioning based on a plurality of pre-adjustment settings, the cushioning mechanism comprising a user cushioning selection mechanism into which the user can input the desired amount of cushioning, the desired amount of cushioning selected from the group consisting of hard, medium, and soft;

- a sensor adapted so as to sense deflection of the deck, the sensor configured to ascertain a coarse weight reading of a user positioned on the deck based on deflection of the deck relative to the frame, the coarse weight reading being associated with one of a plurality of coarse weight reading categories, the cushioning mechanism adapted to automatically adjust the amount of cushioning based on the pre-adjustment settings associated with the coarse weight reading category, the cushioning mechanism adapted to adjust when a user having a different weight from the previous user steps on the deck;

- a controller electrically coupled to the sensor and to the cushioning assembly, the controller adjusting the cushioning mechanism based on the deflection of the deck.

39. **(Previously Presented)** A self-adjusting, cushioned treadmill configured to enable a user to input a desired amount of cushioning and to self-adjust during use of the treadmill such that the desired level of cushioning is achieved, the treadmill comprising:

a frame;  
a deck moveably coupled to the frame;  
first and second rollers coupled to opposing ends of the frame;  
a belt trained about said rollers such that a running surface of said belt extends over said deck,

a cushioning mechanism configured to cushion movement of the deck with respect to the frame, the cushioning mechanism being configured to provide cushioning based on a variety of pre-adjustment settings;

a sensor adapted so as to sense deflection of the deck, the sensor configured to ascertain a coarse weight reading of a user positioned on the deck based on deflection of the deck relative to the frame, the coarse weight reading being associated with one of a variety of coarse weight reading categories, the cushioning mechanism adapted to automatically adjust the amount of cushioning based on the pre-adjustment setting associated with the coarse weight reading category;

a controller electrically coupled to the sensor and to the cushioning assembly, the controller adjusting the cushioning mechanism based on the deflection of the deck, wherein upon sensing a deflection that is greater than an amount that is initially selected by the user upon initial input, the controller signals the cushioning mechanism to decrease the amount of cushioning.

40. **(Previously Presented)** The self adjusting cushioning treadmill of claim 34, wherein the pre-adjustment setting provides an amount of cushioning within a range of available cushioning.

41. **(Canceled)**